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Amendments to the Claims:

1. (Currently Amended) An isolated DNA sequence encoding a functional eukaryotic AHAS small subunit protein, wherein said DNA sequence ~~is not isolatable from *Nicotiana glauca* or maize~~ hybridizes to the complement of SEQ ID NO:1 under conditions comprising:

(a) hybridization at 42°C for 20 hours in a solution comprising 50% formamide, 2X SSC, 5X Denhardt's solution, 1% sodium dodecyl sulfate (SDS), 0.05 mg/ml denatured salmon sperm DNA, and 0.05% NaPPi;

(b) two washes at room temperature for 10 minutes in a solution comprising 0.4X SSC and 0.1% SDS; and

(c) one wash at 65°C for 30 minutes in a solution comprising 0.2X SSC and 0.1% SDS.

2. (Original) The isolated DNA sequence of claim 1 wherein said AHAS small subunit protein is a plant AHAS small subunit protein.

3. (Original) A plant expression vector comprising a promoter expressible in a plant cell operably linked to the DNA sequence of claim 1.

4. (Original) A transgenic plant whose genetic complement comprises the plant expression vector of claim 3.

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5. (Original) A progeny plant of the transgenic plant of claim 4, wherein said progeny plant comprises said plant expression vector.

6. (Original) An isolated DNA sequence encoding the amino acid sequence set forth in SEQ ID NO:2.

7. (Original) A plant expression vector comprising a promoter expressible in a plant cell operably linked to the DNA sequence of claim 6.

8. (Original) A transgenic plant whose genetic complement comprises the plant expression vector of claim 7.

9. (Original) A progeny plant of the transgenic plant of claim 8, wherein said progeny plant comprises said plant expression vector.

10. (Original) A plant expression vector comprising a promoter expressible in a plant cell operably linked to the DNA sequence set forth in SEQ ID NO:1.

11. (Original) A transgenic plant whose genetic complement comprises the plant expression vector of claim 10.

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12. (Original) A progeny plant of the transgenic plant of claim 11, wherein said progeny plant comprises said plant expression vector.

13. (Currently Amended) A transgenic plant whose genetic complement comprises a heterologous promoter expressible in a plant cell operably linked to a an isolated DNA sequence encoding a small subunit of an *Arabidopsis* AHAS protein.

14. (Original) A progeny plant of the transgenic plant of claim 13, wherein said progeny plant comprises said heterologous promoter operably linked to said DNA sequence.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

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21. (Cancelled)

22. (New) A transgenic plant whose genetic complement comprises a plant expression vector comprising a promoter expressible in a plant cell operably linked to an isolated DNA sequence encoding an *Arabidopsis* AHAS small subunit protein.

23. (New) A progeny plant of the transgenic plant of claim 22, wherein said progeny plant comprises said plant expression vector.

24. (New) A transgenic plant whose genetic complement comprises a plant expression vector comprising a promoter expressible in a plant cell operably linked to a DNA sequence encoding an *Arabidopsis* AHAS small subunit protein, wherein said DNA sequence is selected from the group consisting of the DNA sequence set forth in SEQ ID NO: 1 and the DNA sequence set forth in SEQ ID NO: 3.

25. (New) A progeny plant of the transgenic plant of claim 24, wherein said progeny plant comprises said plant expression vector.